`MSS Post Pregnancy Targeted Risk Factor Matrix

MSS Risk Factor	Definition	Desired Outcome	Rationale for Risk Factor	Risk Factor Criteria
Maternal Race	**Client (woman) identifiers herself as:** • African American or Black • American Indian, Alaska Native, or non-Spanish speaking indigenous women from the **Americas** (e.g. women whose primary language is Mixteco, Mam, or Kanjobal, etc.)	Address health disparities in maternal infant mortality and morbidity rates through • Risk assessment- SIDS and contributing factors to infant mortality • Health messages to promote protective factors	2000-2005 US, The infant mortality rate for non-Hispanic black women was 2.4 times the rate for non-Hispanic white women. Rates were also elevated American Indian or Alaska Native women. Washington State: In 2007 African American (10.0 per 1,000) and Native American (13.1 per 1,000) infant mortality rates continued to exceed infant mortality rates of other race/ethnic groups. Total for WA Medicaid population is 5.9 per 1,000. Maternal morbidity for these targeted groups is also of concern. MSS Targeted prenatal risks will continue to be addressed in the postpartum period.	**A.** Not an option for this risk factor **B.** Not an option for this risk factor **C.** American Indian, Alaska Native or non-Spanish speaking indigenous women from the **Americas** (see definition) **C.** African American or Black
Prenatal Care	**Late Entry prenatal care –** no prenatal care established in pregnancy	• Identify reason for no prenatal care • Postpartum care established for mother and infant	No prenatal care can also be an indicator of other risk factors associated with poor birth outcomes. Women who did not access prenatal health care due to mistrust may not access postpartum or infant health care for similar reasons. Postpartum care is important medical assessment including postpartum healing, complications, depression, and preventive interconception health messages including planning for next pregnancy.	**A.** Not an option for this risk factor **B.** No prenatal care established during pregnancy **C.** Not an option for this risk factor

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Nutrition	**Food insecurity**	**Food insecurity**- Running out of food before the end of the month or cutting down on amount eaten to feed others	• Accessing WIC or other food resources	Food insecurity places women at high risk for poor nutrition (malnutrition, anemia), weight gain issues, chronic stress, depression and inability to address other issues in her life including medical appointments and infant needs. During the postpartum period families may not prepare or use infant formula properly. Breastfeeding women may give WIC food to others in family. There is also a higher risk of depression.	**A.** Running out of food before the end of the month or cutting down on food to feed others. **B**. Not an option for this risk factor **C.** Not an option for this risk factor
	Pre-pregnancy BMI 25 to 29.9	**Pre-pregnancy BMI 25 to 29.9** Pre-pregnancy Body Mass Index (BMI) classified as overweight (Pre-pregnancy BMI 25.0 to 29.9). Use CDC BMI table for adults	• Knowledge of healthy weight loss	During the postpartum period women overweight women at risk of weight retention and obesity if they gained more than the IOM guidelines.	**A.** Pre-pregnancy BMI 25.0 to 29.9 **B.** Not an option for this risk factor. **C.** Not an option for this risk factor.
	Pre-pregnancy BMI ≥ 30	**Pre-pregnancy BMI greater than or equal to ≥ 30** Pre-pregnancy Body Mass Index (BMI) classified as obese (Pre-pregnancy BMI greater than and equal to ≥30.0). Use CDC BMI table for adults	• Develop healthy post pregnancy meal plan • Knowledge of healthy weight loss	During the postpartum period women obese women are at higher risk for infection, infant feeding issues, poor healing, weight retention long term and continued HTN and diabetes.	**A.** Pre-pregnancy BMI greater than or equal to (≥) 30.0 and pregnancy weight gain **within guidelines** (See weight gain Rx on clarification table) **B.** Pre-pregnancy BMI greater than or equal (≥) 30.0 and weight gain **outside guidelines** (See weight gain Rx on clarification table) **C.** Not an option for this risk factor
Short Inter-pregnancy Interval- less than 9 months		Period between end of last pregnancy and current pregnancy is less than (<) 9 months. (This includes miscarriages, terminations)	• Increased knowledge of health related benefits for mother and infants of birth spacing. • Family planning health education completed, decisions made and methods implemented (if applicable).	Shorten Interval between pregnancies does not allow for a woman's body to return to optimum physiologic and nutrition status before pregnancy. The optimum birth spacing interval would be greater than or equal 2 years and less than 5 years.	**A.** Current pregnancy conception less than (<) 9 months from end of last pregnancy. **B.** Not an option for this risk factor **C.** Not an option for this risk factor

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Medical	**Fetal Death**	**Fetal death** this pregnancy- fetus greater than 20 weeks gestation and died in utero or was born dead	Women , family members who have experienced fetal death will receive: •Resources for grief support •Medical care •Health messages related to family planning	The etiology of the fetal death influences the chance of recurrence. A complete evaluation following a loss is very beneficial in providing the best estimate of subsequent pregnancy outcomes.	**A.** Not an option for this risk factor **B.** Fetal death this pregnancy- fetus greater than 20 weeks gestation and died in utero or was born dead **C.** Not an option for this risk factor
	Diabetes	Diabetes diagnosed prior to pregnancy: • **Type 1** is an insulin dependent diabetic • **Type 2** is diet controlled and possibly taking oral medication	**Stable blood sugars:** Fasting 60mg -100mg/dl 1hr postprandial 100-140 mg/dl 2hr postprandial <120 mg/dl Before Bed 100-120mg/d • Blood sugars within normal range • Knowledge of healthy meal plan to promote stable blood sugars • Knowledge of diabetes risk related to herself and infant long term	Type 1 or 2 diabetes places women at risks for depression, hypo & hyperglycemia, infection, poor healing. Infants are at risk of birth defects, respiratory distress, jaundice and hypoglycemia	**A.** Not an option for this risk factor **B.** Not an option for this risk factor **C.** Diabetic Type 1 or 2
	Gestational Diabetes	**Gestational Diabetes**: Pregnant women who did not have diabetes prior to pregnancy but have been diagnosed by a medical provider to have high blood sugar (glucose) levels during pregnancy (determined by glucose tolerance test)		Gestational diabetes places women at risk for depression infection and chronic diabetes in the future. Infants are at higher risk for jaundice, hypoglycemia, macrosomia, birth injury due to macrosomia, feeding issues and later in life diabetes.	**A.** Not an option for this risk factor **B.** Not an option for this risk factor **C.** Gestational diabetes with current pregnancy
	Hypertension (HTN)	**Chronic high blood pressure (BP)** greater than or equal to 140/90 at more than one reading which started before woman became pregnant or before 5 months of pregnancy (less then 20 weeks gestation) **Gestational Hypertension (GH)**: Blood pressure screening greater than and equal to 140/90 and started when the woman was more than 5 months pregnant. **Postpartum Hypertension:** Hypertension in the postpartum period. In some women this can develop following delivery which wasn't present in PG.	Blood pressure less than or equal to 120/80; • Following prescribed care by medical provider • Stable blood pressure • Following diet and physical activity recommendations to promote blood pressure within normal limits.	Women with hypertension during pregnancy resulting in Preeclampsia or eclampsia experience high risk deliveries/treatment which can put both mother and infant at risk in the post-pregnancy period. Women are also at increased risk of going into a hypertensive crisis after delivery – immediately or with in the week after delivery.	**A.** History of gestational hypertension **B.** Not an option for this risk factor **C.** Chronic Hypertension-diagnosed prior to pregnancy or before 20 weeks gestation **Or** Gestational Hypertension with this pregnancy. **Or** Post partum hypertension.

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Medical	**Multiple Gestation**	**Delivered more than one baby**	• Infants are receiving prescribed health care and any needed health related services. • Family is knowledgeable of community resources. • Families have received stress reduction health messages regarding coping and accessing support system. • Mother has been screened for depression and referred to services if needed.	Multiple fetuses have the highest incidence of preterm/low birth rate. There is increased risk of long term health problems and developmental issues for multiples who are low birth weight/ preterm and/or experience high risk deliveries causing inadequate oxygen supply or other birth complications. Parental stress related to child rearing is increased with multiples. Incidence of the risk for post partum depression is increased for mothers of multiples.	**A**. Not an option for this risk factor **B.** Not an option for this risk factor **C**. Current pregnancy delivered multiple fetuses
Maternal Age		**17 years of age or younger at the time of screening**	• Connected to a support system –family, school, WIC • Knowledge of Family planning • Parenting class referral	All teens (as a population) are at risk for poor birth outcomes, challenges of parenting, and struggling with a lifetime of poverty due to a limited support system, education, resources and decision making skills. Teens are also at increased risk for repeat pregnancies in less than 2 years.	**A.** Not an option for this risk factor **B.** 17 years of age or younger at the time of postpartum screening **C.** Not an option for this risk factor
Tobacco Use		**Maternal use of tobacco or Second hand exposure**	• Abstinence of tobacco use • Client is knowledgeable of resources to support smoking cessation. • Client is knowledgeable of risks related to second hand expose to infant. • Plan in place to reduce second hand exposure if applicable	Abstinence from tobacco use will reduce risk for short and long term health problems for woman and family. Second hand smoke exposure of infants can increase risk for Sudden Infant Death Syndrome/ Sudden Unexplained Infant Death (SIDS/SUID) ear infections, asthma, and other breathing problems.	**A.** Not an option for this risk factor **B.** Maternal tobacco use- Currently smokes or uses tobacco. **Or** Second hand smoke exposure of infant- infant is exposed to active smoking in his/her living environment (i.e. inside the home, car, day care). **C.** Not an option for this risk factor

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Alcohol and Substance Abuse or Addiction	Use or abuse of: • Alcohol • Illicit substances – i.e. cocaine, methamphetamine, marijuana, heroin • Non prescriptive use of prescription drugs i.e. Oxycodone, Xanax • Diagnosed with abuse or dependence to alcohol and or substances and less than 90 days of no use and/or inconsistent participation in Chemical Dependency treatment.	No alcohol abuse, illicit substance use and/or non prescriptive use of prescription drugs For those who have abuse or addiction problems: reach and continue abstinence and are actively involved in drug and alcohol treatment.	Research has demonstrated that children of parents with substance use disorders are more likely to experience abuse (physical, sexual, or emotional) or neglect than children in other households. As infants, they may suffer from attachment difficulties that develop because of inconsistent care and nurturing, which may interfere with their emotional development. (Child Welfare Information Gateway, 2009)	***B.** Stopped substance use upon diagnosis of pregnancy ***B.** Used alcohol and substances during pregnancy but a**ctively** engaged in **alcohol/drug treatment** program and has not used for more than or equal to **(≥) 90 days** ***C. Used** alcohol, illicit substances, or non prescriptive use of prescription drugs **during pregnancy or** a**bstinent** from use of alcohol, illicit substances, or non prescriptive use of prescription drugs for less than **(<) 90 days.** **Time spent incarcerated does not count toward 90 day clean and sober.**
Mental Health Severe Mental Illness Perinatal Mood Disorders	Severe Mental Illness (SMI): preexisting mental health diagnosis resulting in impairment of general functioning, i.e. current or previous suicidal ideation or attempts, previous psychiatric hospitalization and current or recent use (6mos or less) use of psychotropic medication Perinatal Mood Disorders: depressed mood and anxiety symptoms that occur during pregnancy or up to one year postpartum which result in impairment of general functioning.	• Knowledgeable of her individual mental health symptoms and possible impact on infant. • Understands treatment options • Initiates and is compliant with prescribed care.	Symptoms of mental illness may inhibit a parents' capacity to care for their child. Depressed women, for example, may become less emotionally involved and invested in their new born needs and development.	*** A. No history** of mental health diagnosis, answers "Yes" to "In the last month, have you felt down, depressed or hopeless?" or showing potential symptoms of depression, but has **negative** score on standardized depression **screening** tool. i.e. Edinburgh, CES-D ***B. (1)** History of mental health treatment but is stable, **or** history of postpartum depression with previous pregnancy, and negative score on standardized depression screening tool. **(2)**Current mental health diagnosis and is **engaged** in a mental health treatment ***C. (1)** Mental health symptoms are evidenced by positive score on standardized depression screening tool **(2)** Client has a mental health diagnosis and exhibiting active symptoms which are interfering with general functioning.

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Severe Developmental Disability (RCW 71A.10.020(3)	A disability attributable to: mental retardation, cerebral palsy, epilepsy, autism, or another neurological or other condition closely related to mental retardation or that requires treatment similar to that required for individuals with mental retardation, which originated before the individual attained age 18 can be expected to continue indefinitely and results in substantial limitations to an individual's intellectual and/or adaptive functioning.	Post pregnant women with a developmental disability will receive health education, support and case management services (including care coordination) to promote healthy parenting practices and self care. • Support System developed • Safety net for child	Intellectual limitations can interfere with parenting of an infant, recognizing or accessing health care needs of infant and self, and accessing community resources for support and education.	**A.** Severe developmental disability which may impact the woman's ability to care for herself or an infant, but has **adequate** social support **and follows through** with health care appointments/advice and infant or self care. **B.** Not an option for this risk factor. **C.** Severe developmental disability which impacts the woman's ability to care for herself or an infant, **and has inadequate** social support **or** does **not demonstrate** evidence of follow through with health care appointments/ advice, infant or self care.
Intimate Partner Violence (IPV)	IPV – according to the CDC, is a serious, preventable public health problem. Intimate partner violence describes physical, sexual, or psychological harm by a current or former partner or spouse. There are 4 main types of IPV (Saltzman et al. 2002): physical violence, sexual violence, threats of physical or sexual violence.	All MSS clients are screened and provided health messages about IPV Referrals are made and safety plans developed if indicated.	Women who experienced intimate partner violence have increased risk in delivering preterm infants; underweight infants; or infant spending time in Neonatal Intensive Care Unit. (PRAMS research project 2000-2003 data). Also there is an increased risk of abuse to infant	**A.** No history of IPV or it occurred more than one year ago. **B.** In the last year, the woman's intimate partner and/or FOB has committed/ threatened physical/sexual violence against her. **C.** Not an Option for this risk factor.
Child Protective Services (CPS)	CPS involvement means case is accepted for investigated, case file open and services offered including child placement and/or parental rights terminated.	Parents are interacting and providing care to infant in a way that promotes infant growth and development and protects the infant from harm.	Child abuse and neglect fatalities are a serious problem nationally, underscoring the extreme vulnerability of young children.	**A.** Not an option for this risk factor ***B** History of CPS involvement as the parent/caretaker, not current open/active case. ***C.** Client is identified as the parent/ caretaker within a family unit that has an open CPS case.

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Infant Risks	**Low Birth Weight infant (LBW) and/or Preterm birth**	**Current PG resulted in** • Low Birth Weight (LBW) infant. LBW = Birth weight less than (<)5 pounds 8 ounces (2500 gm**)** • Premature birth less than (<) 37 weeks	• Stable infant growth • Child wellness appointments followed • Parent – infant bonding intact • Screen for depression and provide health message regarding coping	Preterm and LBW infants are at increased risk for growth and development delays, Respiratory Distress Syndrome (RDS), feeding problems, medical issues, SIDS, hearing loss, decreased parent – infant bonding. etc., depending on gestational age, presence of inter-uterine growth restriction, complications at time of delivery or other targeted risks during pregnancy. Maternal stress/grief can increase risk for postpartum depression. Potential for child abuse and neglect: Nearly 40 percent of very young children in foster care are born low-birth weight or premature or both, two factors which increase their likelihood of medical problems and developmental delay. (*Zero to Three 2005)*	**A.** Not an option for this risk factor **B**. Not an option for this risk factor. **C.** Pregnancy resulted in preterm and/or LBW infant
	Slow weight gain	**Slow weight gain**- i.e. loss of more than 10% of body weight since birth, has not gained back to birth weight by two weeks of age. Deceleration of growth over 2 percentile on the weight/age graph. This should be determined by a clinician trained to review weight gain.	• Stable growth	Weight for age is a sensitive indicator of acute nutrition inadequacy. The rate of weight gain during infancy is rapid. Slow growth can be an indicator of a medical condition, illness, feeding issue, parent lack of knowledge and/or neglect.	**A.** Not an option for this risk factor **B** Not an option for this risk factor ***C**. Infant **with slow weight gain**

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Infant Risk Cont'd	**Breastfeeding Complications-** inadequate milk transfer/ineffective suck or inadequate stools This should be determined by doctor or lactation consultant trained in breastfeeding assessment. Documentation shall support the determination of inadequate milk transfer/ineffective suck. Stool frequency and/or color per AAP.	• Lactation consultation • Stable growth • Continued breastfeeding if not contraindicated	Breastfeeding complications can lead to dehydration, slow weight gain, failure to thrive, jaundice and termination of breastfeeding Exclusive breastfeeding is the model against which all alternative feeding methods must be measured with regard to growth, health, development, and all other short- and long-term outcomes. In addition, premature infants receive significant benefits with respect to host protection and improved developmental outcomes compared with formula-fed premature infants (AAP).	**A.** Not an option for this risk factor **B** Not an option for this risk factor ***C. Breastfeeding complications-** inadequate milk transfer/ineffective suck or inadequate stools
	Infant with **birth defect and/or health problems.** This risk factor is referring to significant health problems needing medical follow up, case management and MSS intervention by a clinician.	Infants with birth defects or other health problems will receive early and prescribed pediatric care. Family will be knowledgeable of treatment and care of condition, and connected to community support and resources.	Infant Health: The sooner problems or potential risks are identified, the greater the chance of eliminating or minimizing existing problems or preventing future problems.	**A.** Not an option for this risk factor **B** Not an option for this risk factor ***C.** Infant with birth defect and/or health problems
	Drug/alcohol exposed newborn**. Substance Exposed Newborn** is one who: • Tests positive for substance(s) at birth or • The mother tests positive for substance(s) at the time of delivery or • The newborn is identified by a medical practitioner as having been prenatally exposed to substance(s)	Mother of infant achieves abstinence of drugs and alcohol and is engaged in chemical dependency treatment. Parents or care givers are: • Providing a safe and caring environment • Knowledgeable of symptoms associated with drug and /or alcohol exposure. • Connected to pediatric health care providers	A well-organized, developmentally oriented approach toward early recognition and intervention has the best chance to be a successful treatment outcome for drug-alcohol exposed children.	**A.** Not an option for this risk factor **B** Not an option for this risk factor ***C.** Drug/alcohol exposed newborn